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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Original) A method for selecting an operating frequency for a communication device being added to a wireless network including one or more existing communication devices, comprising:

interrogating one or more of the existing communication devices to obtain communication parameter data indicative of at least the operating frequencies in use by the existing communication devices;

evaluating the communication parameter data; and

selecting the operating frequency of the communication device being added to the wireless communications network in accordance with said evaluated communication parameter data.

Claim 2. (Original) A method according to claim 1, wherein said step of interrogating includes transmitting at least one request signal at each of a plurality of operating frequencies, wherein any existing communication device receiving the at least one request signal transmits a response signal indicative of receipt of said request signal.

Claim 3. (Original) A method according to claim 1, wherein said communication parameter data further includes a value indicative of the received signal strength of received response signals.

Claim 4. (Original) A method according to claim 1, wherein said step of evaluating the communication parameter data includes determining a value indicative of how many of the existing communication devices use each operating frequency.

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Claim 5. (Original) A method according to claim 1, wherein said communication parameter data further includes a value indicative of a load factor associated with a respective communication device.

Claim 6. (Original) A method according to claim 1, wherein said step of evaluating includes determining which operating frequency will result in the greatest balance among the operating frequencies being used.

Claim 7. (Currently Amended) A method according to claim 1, wherein said step of determining the respective operating frequency of interrogating one or more the existing communication devices includes:

transmitting at the communication device being added, at least one request signal at each of a plurality of operating frequencies, wherein any existing communication device receiving the at least one request signal transmits a response signal indicative of receipt of said request signal.

Claim 8. (Original) A method according to claim 1, wherein said step of selecting the operating frequency selects an optimum non-overlapping operating frequency.

Claim 9. (Original) A method according to claim 9, wherein said optimum non-overlapping frequency is the least used non-overlapping operating frequency.

Claim 10. (Original) A method according to claim 1, wherein said communication device is an access point, and said existing communication devices are access points.

Claim 11. (Original) An apparatus for selecting an operating frequency for a communication device newly added to a wireless network having one or more existing communication device, comprising:

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means for interrogating one or more of the existing communication devices to obtain communication parameter data indicative of at least the operating frequencies in use by the existing communication devices;

means for evaluating the communication parameter data; and
means for selecting the operating frequency for the communications device being
added to the wireless communications netw ork in accordance with said evaluated
communication parameter data.

Claim 12. (Original) An apparatus according to claim 11, wherein said means for interrogating includes means for transmitting at least one request signal at each of a plurality of operating frequencies, wherein any existing communication device receiving the at least one request signal transmits a response signal indicative of receipt of said request signal.

Claim 13. (Original) An apparatus according to claim 11, wherein said communication parameter data obtained by said means for interrogating further includes a value indicative of the received signal strength of received response signals.

Claim 14. (Original) An apparatus according to claim 11, wherein said means for evaluating the communication parameter data includes means for determining a value indicative of how many of the existing communication devices use each operating frequency.

Claim 15. (Original) An apparatus according to claim 11, wherein said communication parameter data obtained by said means for interrogating further includes a value indicative of a load factor associated with a respective communication device.

Claim 16. (Original) An apparatus according to claim 11, wherein said means for evaluating includes means for determining which operating frequency will result in the greatest balance among the operating frequencies being used.

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Claim 17. (Original) An apparatus according to claim 11, wherein said means for selecting the operating frequency selects an optimum non-overlapping operating frequency.

Claim 18. (Original) An apparatus according to claim 11, wherein said communication device is an access point, and said existing communication devices are access points.

Claim 19 (New): A method for a wireless base unit to select an operating frequency, comprising: determining for each of a plurality of frequencies whether another base unit is using each of the plurality of frequencies; and

selecting the operating frequency based on whether another base unit is detected using the selected frequency.

Claim 20 (New): The method of claim 19, wherein the selected operating frequency is the least used non-overlapping frequency of the plurality of frequencies.

Claim 21 (New): The method of claim 19, further comprising:

sending a request signal requesting base units receiving the signal respond to the request signal;

wherein the determining step further comprises waiting for a response to the request signal.

Claim 22 (New): The method of claim 21, wherein the request signal is sent on each of the plurality of frequencies.

Claim 23 (New): The method of claim 21, the determining step further comprising waiting a predetermined time period for the response to the request signal.

Claim 24 (New): The method of claim 21, wherein the predetermined time is at least 10 milliseconds.

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Claim 25 (New): The method of claim 24 wherein the request signal is one of a probe request packet, a find router packet and a router identification packet.

Claim 26 (New) The method of claim 21 further comprising sending the request signal at least three times.

Claim 27 (New): The method of claim 21, further comprising measuring the signal strength of the response to the request signal.

Claim 28 (New): A method for a wireless base unit to select an operating frequency, comprising: detecting other base stations operating on each of a plurality of frequencies; obtaining information concerning the load on the other base stations; selecting the operating frequency based on the load on the other base stations.

Claim 29 (New): The method of claim 28, further comprising:

sending a request signal requesting base units receiving the signal respond to the request signal;

wherein the obtaining step further comprises receiving load data from a data field in the response to the request signal from other base stations.

Claim 30 (New): A method for selecting an operating frequency for a wireless base unit, comprising:

determining how many other base units are operating at each of a plurality of frequencies; selecting the operating frequency based on how many other base units are using the selected operating frequency.

Claim 31 (New): The method of claim 30, wherein the selected operating frequency is the least used non-overlapping frequency of the plurality of frequencies.

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Claim 32 (New): The method of claim 30, further comprising:

sending a request signal requesting base units receiving the signal respond to the request signal;

wherein the determining step further comprises waiting a predetermined time for a response to the request signal.

Claim 33 (New): The method of claim 32, further comprising measuring the signal strength of the response to the request signal; and

the selecting step further comprising selecting the operating frequency based on how many other base stations are using the selected operating frequency and signal strength.

Claim 34 (New): A method for a wireless base unit to select an operating frequency, comprising: obtaining information concerning the load on the other base stations;

the selecting step further comprising selecting the operating frequency based on based on how many other base stations are using the selected operating frequency, measured signal strength and the load on the other base stations.

Claim 35 (New): The method of claim 34, further comprising:

sending a request signal requesting base units receiving the signal respond to the request signal;

wherein the obtaining step further comprises receiving load data from a data field in the response to the request signal from other base stations.

Claim 36 (New): An access point, comprising:

a transceiver operative to transmit and receive signals on any of a plurality of frequencies, and

a controller suitably adapted to set an operating frequency for the transceiver selected from the plurality of frequencies;

wherein the transceiver being responsive to the controller to scan a plurality of frequencies to enable the controller to ascertain a number of other access points operating at each of the plurality of access points; and

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wherein the controller is configured to select the operating frequency based on the number of other access points operating at each of the plurality of frequencies.

Claim 37 (New): The access point of claim 36,

the controller further being configured to select the operating frequency by selecting the least used non-overlapping frequency of the plurality of frequencies.

Claim 38 (New): The access point of claim 36,

wherein the transceiver is further responsive to the controller to send a request packet on each of the plurality of frequencies; and

the transceiver waiting for a response to the request packet.

Claim 39 (New): The access point of claim 38, wherein the transceiver measures the signal strength of the response to the request packet, the controller being responsive to the transceiver to select the operating frequency based on the number of access points operating at each of the plurality of frequencies and the signal strength.

Claim 40 (New): The access point of claim 38, the response to the request packet further comprises a data field indicative of the load of the other access point responding to the request packet, the controller being responsive to the transceiver to select the operating frequency based on the number of access points operating at each of the plurality of frequencies and the load of the other access points.

Claim 41 (New): The access point of claim 40, wherein the transceiver measures the signal strength of the response to the request packet, the controller being responsive to the transceiver to select the operating frequency based on the number of access points operating at each of the plurality of frequencies the signal strength of the response to the request packet, and the load of the other access points.

Claim 42 (New): An access point comprising:

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a transceiver operative to transmit and receive on any of a plurality of frequencies; and a controller operative to set the operating frequency selected from the plurality of frequencies for the transceiver;

wherein the controller is operative to select the operating frequency based on at least one of the number of other access points operating at each frequency; the measured signal strength of signals received from other access points operating at each frequency and a load of other access points operating at each frequency.

Claim 43 (New): The access point of claim 42, wherein the controller is further operative to select the operating frequency based on which frequency will cause the least amount of interference with communications being conducted by other access points.

Claim 44 (New): A computer readable medium of instructions, comprising:

means for transmitting and receiving on a selected operating frequency selected from a plurality of frequencies;

means for selecting the selected operating frequency coupled to the means for transmitting and receiving;

the means for selecting further comprises means for sending a probe request on each of the plurality of frequencies by the means for transmitting and receiving, the probe request configured to request a recipient of the probe request belonging to a specified group of recipients to respond;

the means for selecting further comprises means for receiving a probe response to the probe request by the means for transmitting and receiving; and

the means for selecting further comprises means for analyzing the probe response and selecting the selected operating frequency based on data obtained from the probe response.

Claim 45 (New): The computer readable medium of instructions of claim 44,

the means for analyzing determining how many of the specified group of recipients are using each channel; and

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selecting the operating frequency based on whether another base unit is using the selected frequency.

Claim 46 (New): The method of claim 45, wherein the selected operating frequency is the least used non-overlapping frequency of the plurality of frequencies.

Claim 47 (New): The method of claim 44, further comprising means for measuring the signal strength of the probe response; and the means for selecting configured to select the operating frequency based on the signal strength of the probe response.

Claim 48 (New): The method of claim 44,

the means for analyzing further comprising means for obtaining information concerning the load on the other base stations from the probe response; and

the means for selecting configured to select the operating frequency based on the load on the other base stations.